

WHAT IS CLAIMED IS:

1. A method of manufacturing a large EL panel which includes a plurality of EL display panels, each of said plurality of EL display panels being formed of an EL display device and a sub-transparent substrate that supports said EL display device in parallel, said EL display device including: a base layer over which a luminescent material is applied; an electrode layer which is laminated on one side of said base layer; and a TFT layer including a circuit section in which light emission of the luminescent material is controlled by applying a predetermined voltage between said electrode layer and said TFT layer and a pixel section which is superimposed over another side of said base layer opposite the one side and which is provided with a plurality of pixels which divide said base layer into sections so that light emission of the luminescent material in each section is individually controlled by generating a potential difference between said electrode layer and said TFT layer at the corresponding section, said method of manufacturing comprising the steps of:

removing said EL display devices from said sub transparent substrates;

arranging the obtained EL display devices on a main transparent substrate, which is broader than said sub-transparent substrate, in a matrix pattern and in a manner such that light emitting areas of said adjacent EL display devices are in proximity to each other; and

disposing and fixing said circuit section of said TFT layer, which is disposed at a region outside the light emitting area, behind an adjacent EL display device.

2. The manufacturing method for a large EL panel according to Claim 1, the fixing step including fixing the circuit section of said TFT layer in a manner such that said TFT layer is bent at a boundary between said circuit section, and said pixel section and said circuit section is disposed behind an adjacent EL display device.

3. The manufacturing method for a large EL panel according to Claim 1, further including changing a thickness of an adhesive layer used to laminate the EL display devices on said main transparent substrate so as to form a step portion which changes positions of the adjacent EL display devices in a thickness direction, so that said circuit section is disposed behind an adjacent EL display device.

4. The manufacturing method for a large EL panel according to Claim 1, further including inverting adjacent EL display devices, and increasing a thickness of said pixel portion of said TFT layer so as to compensate for displacement between the base layers of adjacent EL display devices, which is caused as a result of the inverting steps, so that said circuit section is disposed behind the adjacent EL display device.

5. A manufacturing method of an EL panel comprising the steps of:  
providing a substrate;  
disposing a first EL display element above said substrate, wherein a plurality of first pixel sections are arranged in the first EL display element, each of the first pixel sections is capable of emitting lights, and a first circuit section controls the emissions of the first pixel sections; and

disposing a second EL display element above said substrate so as to be arranged adjacent to the first EL display element, wherein a plurality of second pixel sections are arranged in the first EL display element, each of the second pixel sections is capable of emitting lights, wherein said first circuit section and said second EL display element overlap with each other such that a pitch between adjacent ones of the first pixel sections and the second pixel sections is approximately constant with a pitch between adjacent ones of the first pixel sections.

6. The manufacturing method of an EL panel according to claim 5, wherein a second circuit section controls the emissions of said second pixel sections, the method further comprising:

disposing a third EL display element that overlaps with the second circuit section, wherein a plurality of third pixel sections are arranged in the third EL element, each of the second pixel sections being capable of emitting lights,

wherein a pitch between adjacent ones of the second pixel sections and the third pixel sections is approximately constant with at least one of a pitch between adjacent ones of the first pixel sections and a pitch between adjacent ones of the second pixel sections.

7. The manufacturing method of an EL panel according to claim 5, wherein the second EL display element emits light from a first side, and wherein the second EL element overlaps with the first circuit section at a second side opposite to the first side.

8. The manufacturing method of an EL panel according to claim 5, said substrate being transparency and supporting said second EL display element from said second side thereof.

9. The manufacturing method of an EL panel according to claim 8, wherein said first EL display element and said second EL element are adjoined by adhesive material.

10. The manufacturing method of an EL panel according to claim 5, further comprising the steps of connecting said first circuit section and said first pixel sections to each other; and bending said first circuit section such that the first circuit section overlaps with the second EL display element.

11. The manufacturing of an EL panel according to claim 5, further comprising a step of forming a layer that fills a gap formed between the second EL display element and the first circuit section.

12. The manufacturing method of an EL according to claim 5, wherein the thickness of the first circuit section is thinner than that of the first pixel sections.

13. The manufacturing method of an EL panel comprising the steps of:  
providing a substrate;

disposing a first EL display element above said substrate, wherein a plurality of first pixel sections are arranged in said first EL display element, each of the first pixel sections being capable of emitting lights, and a first circuit section controls the emissions of the first pixel sections; and

disposing a second EL display element above said substrate so as to be arranged adjacent to the first EL display element such that a pitch between adjacent ones of the first pixel sections and the second pixel sections is approximately constant with a pitch between adjacent ones of the first pixel sections.

14. The manufacturing method of an EL panel according to claim 13, wherein said first section is arranged at a side that is not adjacent the second EL display element and wherein a second circuit section is arranged at a side that is not adjacent the first EL display element.

15. A manufacturing method of an EL panel comprising the steps of:  
providing a substrate;

disposing a first EL display element above said substrate, wherein a plurality of pixel sections are arranged in the first EL display element, each of the first pixel sections being capable of emitting lights, and a circuit section controls the emission of the pixel sections;

disposing a second EL display element above said substrate; and  
forming a layer for filling a gap between the second EL display element and the circuit section.